

Specimen Label



Dow AgroSciences

Reclaim^{*}

Specialty Herbicide

*Trademark of Dow AgroSciences LLC

For the control of mesquite, associated woody species and weeds on rangeland and permanent grass pastures only in New Mexico, Oklahoma and Texas

Active Ingredient:

clopyralid: 3,6-dichloro-2-pyridinecarboxylic acid,
monoethanolamine salt 40.9%

Inert Ingredients 59.1%

Total 100.0%

Acid Equivalent:

3,6-dichloro-2-pyridinecarboxylic acid - 31% - 3 lb/gal

EPA Reg. No. 62719-83

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

CAUTION PRECAUTION

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

Causes Eye Injury • Harmful If Inhaled Or Absorbed Through Skin

Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

First Aid

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention.

Environmental Hazards

Do not contaminate water by cleaning of equipment or disposal of waste. Do not contaminate water used for irrigation or domestic purposes. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into an aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Physical or Chemical Hazards

Combustible - Do not use or store near heat or open flame. Do not cut or weld container.

Notice: Read the entire label. Use only according to label directions.

Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994. If you wish to obtain additional product information, visit our web site at www.dowagro.com.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal (Metal): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Container Disposal (Plastic): Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Sprayer Clean-Out: To avoid injury to desirable plants, equipment used to apply Reclaim herbicide should be thoroughly cleaned before reusing to apply any other chemicals.

1. Rinse and flush application equipment thoroughly after use at least three times with water. Dispose of rinse water in non-cropland area away from water supplies.
2. During the second rinse, add 1 qt of household ammonia for every 25 gal of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 min.). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Nozzles and screens should be removed and cleaned separately.

General Information

Reclaim herbicide is a highly active, water-soluble liquid product for control of mesquite, associated woody species and weeds on rangeland and permanent grass pastures in New Mexico, Oklahoma and Texas. Very small amounts of this product can kill or injure sensitive broadleaved plants. To prevent accidental damage to crops and other desirable plants, follow all directions and precautions.

This product affects plants directly through foliage and indirectly by root uptake from treated soil. Grasses are tolerant, but new grass seedlings may be injured to varying degrees until the grass has become well established.

General Use Precautions

Do not plant crops in treated land for one year after application.

This product contains the herbicide clopyralid, which is highly phytotoxic on broadleaf plants and is water soluble. Do not apply Reclaim directly to, or allow spray drift to come into contact with vegetables, ornamentals, various susceptible crops, or other susceptible desirable plants not intended to be sprayed. Small areas of new legume seedlings should be established prior to seeding more extensive areas in order to determine if phytotoxic residues are present in the soil at a level that inhibit legume establishment. Do not use grass or hay from treated areas for composting or mulching of susceptible broadleaf crops.

Avoid Injurious Spray Drift

Applications should be made to avoid spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods. To minimize spray drift, use low nozzle pressure, apply as a coarse spray, and use nozzles designed for herbicide application that do not produce a fine droplet spray. To aid in further reducing drift, a drift control and deposition aid such as Nalco-Trol, or equivalent, may be used with this product. If such a drift control aid is used, follow all use recommendations and precautions on the product label.

Ground application: With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 gallons or more of spray per acre; by keeping the operating spray pressures at the manufacturer's minimum recommended pressures for the specified nozzle type used (low pressure nozzles are available from spray equipment manufacturers); by spraying when the wind velocity is low (Follow state regulations). Avoid calm conditions which may be conducive to air inversion. In hand-gun applications, select the minimum pressure to obtain adequate plant coverage (without forming a mist). Do not apply with a mist blower.

Aerial application: With aircraft, drift can be lessened by using straight stream nozzles directed straight back; by using a spray boom no longer than 3/4 of the rotor or wing length of the aircraft; by using drift control systems or use drift control additives such as Nalco-Trol, or equivalent; by keeping spray pressures low enough to provide coarse spray droplets. Do not use a thickening agent with the Microfoil or the Thru-Valve booms, or other systems which cannot accommodate thick sprays. Spray only when the wind velocity is low (Follow state regulations). Avoid calm conditions which may be conducive to air inversions.

Do not apply by aircraft when an air temperature inversion exists:

Such a condition is characterized by little or no wind and with lower air temperature near the ground than at higher levels. The use of a smoke device on the aircraft or continuous smoke column at or near the site of application will indicate air direction and velocity, and whether a temperature inversion is present, which is shown by the layering of the smoke.

Do not contaminate water intended for irrigation or domestic

purposes: To avoid injury to crops or other desirable plants, do not treat or allow spray drift to fall onto banks or bottoms of irrigation ditches or other channels that carry water that may be used for irrigation purposes.

Do not transfer livestock from treated grazing areas onto sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated pasture. Otherwise, urine may contain enough clopyralid to cause injury to sensitive broadleaf plants.

Observe label of other products used in tank mixtures and follow recommendations thoroughly.

Chemigation: Do not apply this product through any type of irrigation system.

Approved Uses

Rangeland and Permanent Grass Pastures

Use Reclaim in rangeland and permanent grass pastures to control certain brush and weed species including mesquite, acacias, and certain other broadleaf plants. Apply as a coarse low pressure spray using ground equipment or aircraft. Use enough spray volume to provide uniform coverage of the brush or weed species.

Note: Many forbs are susceptible to Reclaim. Do not spray pastures containing desirable forbs, especially legumes, unless injury to such plants can be tolerated. However, the stand and growth of established perennial grasses is usually improved after spraying, especially when rainfall is adequate and grazing is deferred.

For best results on mesquite, apply in the spring or early summer during the period 40 to 90 days after the first green growth appears and when soil moisture is adequate for good growth. Environmental conditions may influence results considerably. Soil temperatures of 75 to 83 degrees F at a 12 to 18 inch depth have been reported as optimal for good plant kills. Soil temperatures of less than 75 degrees F at this depth will reduce the ultimate root kill of mesquite. Soil temperatures will vary with soil types. Clay soils (bottomland soils) or wet soils are colder soils and/or slower to warm up than coarser textured (and/or upland soils) or dry soil. Degree of control can vary accordingly. Do not treat when plants have new (light green) terminal growth in response to recent heavy rainfall during the growing season. Do not treat when mesquite or other plant species are showing injury to the foliage due to insects, rust, hail and/or late frost. These conditions can reduce chemical uptake and adversely affect the performance of the product.

The herbicidal effects of mesquite treated with Reclaim are often different from those resulting from application of other commonly used products. In some years, complete brownout and leaf drop of the herbicide treated mesquite may be delayed and not occur before the first frost. However, symptoms often observed could include bark discoloration and rupture and/or "bleeding" of the tree branches and trunks.

Do not treat more than once in a year. Retreatment may not be effective unless trees have developed sufficient foliar canopy to intercept the spray and provide adequate translocation of the herbicide from the plant foliage to the root system.

Control of rangeland brush or weeds may be unsatisfactory under severe drought stress or other conditions that inhibit good growth.

Mesquite regrowth should be at least 4 feet tall for best results from foliar broadcast applications.

Mesquite Control with Late Season Application

Reclaim may be applied for **late season** mesquite control in certain counties of West Texas and in Western Oklahoma. In West Texas, applications may be made in the following contiguous counties and those counties to the north and west:

Montague, Wise, Parker, Hood, Somerville, Bosque, Coryell, Lampasas, Burnet, Blanco, Kendall, Bandera, Real, Edwards, and Val Verde. In Western Oklahoma, applications made in Harmon, Jackson, and Tillman counties require **Special Permits** prior to the application of hormone-type herbicides. Consult with local Extension and Oklahoma State Department of Agriculture personnel and comply with all Oklahoma State Department of Agriculture requirements.

Make applications between August 1 and September 30 when soil moisture and temperature conditions favor good plant growth. Mesquite should be in full foliage and free of damage from insects or hail. Soil temperature at a depth of 12 inches should be a minimum of 75 degrees. **Do not apply after frost has occurred.**

Apply Reclaim alone at the rate of 1 1/3 pints (0.5 lb ae clopyralid) per acre. Apply aerially as a 1:5 oil-water emulsion in a minimum of four (4) gallons total spray volume per acre. For ground application, apply in 10 to 20 gallons total spray volume per acre of water plus surfactant (0.25% v/v or 1 qt/100 gal) or oil-water emulsion carrier. Note: Use a maximum of 1 gallon of oil per acre for either aerial or ground applications.

Broadcast Ground or Aerial Application

Use Reclaim at the rate of 1 1/3 pints (0.5 lb ae clopyralid) per acre alone or use 2/3 to 1 1/3 pints of Reclaim per acre in combination with Dow AgroSciences registered products for mesquite control on rangeland. (Check with local Dow AgroSciences representative). For aerial applications, use a total spray volume of 2 gallons or more per acre; for ground applications, 10 to 20 gallons per acre are recommended. Since good coverage is essential for acceptable control, higher spray volumes are recommended as the brush density increases. See the "General Information" and "Application Directions" section of the label for more details.

For the control of mesquite growing within live oak stands, apply Reclaim alone at 1 1/3 pints per acre as a 1:5 oil-water emulsion or as a water dilution. Live oak oversprayed with the Reclaim mixture may show a 10 to 20 percent canopy reduction the year of treatment but will recover. The addition of other herbicides as tank mixes may reduce the selectivity (increase live oak injury) of Reclaim on live oak.

High-Volume Leaf Stem Treatment of Individual Plants Using Ground Equipment

For control of mesquite, use 2 to 3 quarts of Reclaim per 100 gallons of total spray solution. Use either an oil-water emulsion (preferred) or a straight dilution with water (see mixing instructions below). Thorough coverage is absolutely necessary for good results, therefore apply as a complete spray-to-wet foliar application, including all leaves, stems and root collars but do not exceed application of more than 1 1/3 pint per acre of Reclaim. To minimize drift, select the minimum pressure to obtain plant coverage without forming a mist and keep sprays no higher than tree tops. Trees taller than 8 feet in height may be hard to treat efficiently and to obtain necessary coverage. Alternate control methods may be considered.

Ground Application - Special Equipment (Carpet Roller)

Reclaim can be applied for mesquite control maintenance with carpeted rollers where drift presents a hazard to susceptible crops, surface waters and other sensitive areas. Apply to mesquite regrowth and previously untreated plants less than 6 feet tall, and short enough to pass beneath the tractor without breaking off at the ground. Mix 1 gallon of Reclaim with 9 gallons of water (or 0.3 lb ae per gallon of mixture) to treat sparse, open stands, or mix 1 gallon of Reclaim with 8 gallons of water (or 0.33 lb ae per gallon of mixture) when treating dense, solid stands. Include 1 ounce of a recommended agricultural surfactant per gallon of herbicide-water mixture (0.75% v/v). Apply from May through August, but preferably in May and June, when moisture availability is sufficient to allow normal plant growth.

Applications made during periods of extended drought conditions will not provide acceptable control. Do not mow, burn, or otherwise disturb the treated plants during the remainder of the growing season. Operate carpeted rollers as close to the ground as possible without breaking the mesquite stems, but above the tallest grasses. Maximize herbicide deposition on mesquite foliage and stems and minimize drippage losses by rotating the carpeted rollers at 30 to 40 rpm with the lower edge moving in the same direction as the direction of travel. Maintain the carpet sufficiently wetted to apply up to 1 gallon per acre of herbicide-water mixture to stands of average density (100 to 200 plants per acre), and up to 1.5 gallons per acre in dense stands (300 to 400 plants per acre). Re-wet rollers at regular intervals. The use of Nalco-Trol or equivalent drift control agent is not recommended with this application method.

Oil-Water Emulsion

Apply as an oil-water emulsion in a total spray volume of 2 or more gallons per acre aerially and 5 or more gallons per acre by ground. Spray mixes prepared as oil-water emulsions perform more dependably than straight water dilutions. The oil used may be diesel fuel, fuel oil or kerosene. For aerial application, add oil to the spray mix at the ration of 1 part oil to 5 parts water, using an appropriate agricultural spray emulsifier such as Sonto 712 or Triton X-100. For ground application, add oil to the total spray mix at the rate of 5 to 10 percent up to a maximum of 1 gallon of oil per acre. Check the intended spray mixture with a compatibility test by adding the spray components in the desired order and proportions in to a clear glass jar before mixing in the spray tank. Agitation in the spray tank must be vigorous to compare with jar test agitation. To insure proper mixing, use the following procedure and maintain continuous, vigorous mechanical, jet or by-pass agitation during the entire mixing process:

- 1) Add half the amount of water to be used to the spray mixing tanks.
- 2) Add the amount of Reclaim required for the total volume of spray being mixed.
- 3) Premix the required amount of oil with the desired quantity of a good emulsifier. Use 3 fluid ounces of emulsifier per gallon of oil included in the mix. The amount of emulsifier should be confirmed in a preliminary jar test. (Consult Reclaim herbicide supplier or Dow AgroSciences for further information about emulsifier products.) Add the oil-emulsifier premix slowly to the spray mixing tank.
- 4) Finally, add the remaining amount of water required to bring the spray batch to the desired volume. When using a drift control additive such as Nalco-Trol or equivalent, as recommended, meter into the water during this final filling stage and check spray mixture for complete dispersion.
- 5) **Maintain agitation in the spray tank during application.**

Water Dilution

Apply as a straight water dilution in a total spray volume of 2 or more gallons per acre aerially and 5 or more gallons per acre by ground. Use an appropriate agricultural surfactant such as X-77 or Wex at a ratio of 1 quart surfactant to 100 gallons spray mix (0.25 percent v/v).

Where mesquite occurs in live oak stands, apply Reclaim alone in water dilution plus surfactant in a total spray volume of 2 or more gallons per acre aerially.

Amounts of Reclaim To Make 100 Gallons of Spray Solution (Oil-Water Mixture)

Label Recommendations		Amounts to make 100 Gallons				
Total Spray Volume (gal/acre)	Reclaim Rate (pt/acre)	Gallons			Ounces	
		Reclaim	Oil†	Water	Emulsifier†	N.T.†
2	2/3	4.2	16.0	79.8	48.0	4.7
4	2/3	2.1	16.3	81.6	48.9	4.9
10	2/3	0.9	10.0	89.1	30.0	5.3
20	2/3	0.4	5.0	94.6	15.0	5.7
2	1 1/3	8.3	15.3	76.4	45.8	4.6
4	1 1/3	4.2	16.0	79.8	48.0	4.7
10	1 1/3	1.7	10.0	88.3	30.0	5.3
20	1 1/3	0.8	5.0	94.2	15.0	5.7

†N. T. - Amount of Nalco-Trol calculated on the basis of 6 oz. of Nalco-Trol per 100 gallons of water. Equivalent additives should be added at equivalent rates of active ingredient.

†Emulsifier such as Sponto 712 or Triton X-100 should be added at the rate of 3 ounces per gallon of oil.

†Do not use more than 1 gallon of oil per acre.

Note: For best coverage by aerial application, swath width should not exceed 1 1/4 times the rotor or wing span of the aircraft.

Label Code: D02-106-005

Replaces Label: 113-34-003

EPA Acceptance Date: 1/5/90

Revision:

Dow AgroSciences notified the EPA that its legal name will change to Dow AgroSciences LLC effective January 1, 1998. The following label changes are being made via non-notification as a result of this company name change:

- Company name changed from DowElanco to Dow AgroSciences LLC (logo, trademark reference, address line, warranty statement)
- Emergency telephone number updated to include a web site address (PR Notice 97-4)

The name of this product and its EPA registration number remain the same. No other changes are being made to the label at this time.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. All such risks shall be assumed by buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

Trademark of Dow AgroSciences LLC

Dow AgroSciences • Indianapolis, IN 46268 U.S.A.